CLAIMS

1. A video amplifier comprising:

a first filter stage having an input terminal adapted to receive an RF signal and an output terminal;

an attenuator having an input terminal coupled to the output terminal of said first filter stage and an output terminal, said attenuator comprising a temperature sensitive device; and

a second filter stage having an input terminal coupled to the output terminal of the attenuator and an output terminal at which an output signal of said video amplifier is provided.

2. The video amplifier of claim 1 wherein said temperature sensitive device is a thermistor.

3. The video amplifier of claim 1 wherein each of said first filter stage and said second filter stage comprises a Sallen-Key filter.

4. The video amplifier of claim 1 wherein each of said first filter stage and said second filter stage has a low-pass characteristic.

5. The video amplifier of claim 1 wherein each of said first filter stage and said second filter stage has a bandpass characteristic.

6. A radar receiver comprising:

an RF amplifier having an input terminal adapted to receive an RF signal and an output terminal at which an amplified RF signal is provided;

a down-converter having an input terminal coupled to said output terminal of said RF amplifier and an output terminal at which a lower frequency signal is provided; and

a video amplifier having an input terminal coupled to said output terminal of said down-converter and an output terminal at which a filtered signal is provided, wherein said video amplifier comprises a temperature compensating attenuator.

7. The radar receiver of claim 6 wherein said RF amplifier is comprised of GaAs transistors.

8. The radar receiver of claim 6 wherein said attenuator comprises a thermistor.

9. The radar receiver of claim 8 wherein said attenuator further comprises at least one resistor coupled to said thermistor to form a voltage divider.

10. The radar receiver of claim 6 said video amplifier further comprises:

a first filter stage having an input terminal coupled to said output terminal of said down-converter and an output terminal coupled to said temperature compensating attenuator; and

a second filter stage having an input terminal coupled to said temperature compensating attenuator and an output terminal at which said filtered signal is provided.

11. The radar receiver of claim 9 wherein each of said first filter stage and said second filter stage has a bandpass characteristic.

12. The radar receiver of claim 11 wherein said bandpass characteristic has a low frequency cutoff selected to attenuate a leakage signal.

13. The radar receiver of claim 11 wherein said bandpass characteristic has a low frequency cutoff selected to attenuate a received RF signal reflected by an object located more than a predetermined distance from said RF receiver.

14. A radar system comprising:

a transmit antenna for transmitting a first RF signal;

a receive antenna for receiving a second RF signal; and

a receiver circuit coupled to said receive antenna for processing said second RF signal and comprising a temperature compensated video amplifier.

15. The radar system of claim 14 wherein said temperature compensated video amplifier comprises:

a first filter stage having an input terminal adapted to receive said second RF signal and an output terminal;

an attenuator having an input terminal coupled to the output terminal of said first filter stage and having an output terminal, said attenuator comprising a temperature sensitive device; and

a second filter stage having an input terminal coupled to the output terminal of the attenuator and an output terminal at which an output signal of said video amplifier is provided.

16. The radar system of claim 15 wherein said receiver circuit further comprises an RF amplifier having a gain which varies by a first predetermined amount with temperature and wherein said attenuator provides a gain which varies by a second predetermined amount with temperature, wherein said first and second predetermined amounts are substantially equal.

17. The radar system of claim 14 wherein each of said first filter stage and said second filter stage has a bandpass characteristic.

18. The radar system of claim 17 wherein said second RF signal includes a portion of said first RF signal and wherein said bandpass characteristic has a low frequency cutoff selected to attenuate said portion of said first RF signal.

19. The radar system of claim 17 wherein said bandpass characteristic has a low frequency cutoff selected to attenuate a received RF signal reflected by an object located more than a predetermined distance from said radar system.

20. The radar system of claim 15 further comprising:

an analog-to-digital converter responsive to said output signal of said video amplifier for providing a digital signal;

a temperature sensor for providing a signal indicative of the temperature of said receiver circuit; and

a digital signal processor responsive to said temperature indicative signal for varying a threshold used to process said digital signal.

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